

Sur 37

150. A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide prepared by expressing a DNA encoding a polypeptide having a sequence comprising amino acids 32 - 194 of Figure 7.

151. The method of claim 150, wherein said DNA encodes a Met at the amino terminus.

152. The method of claim 150, wherein said DNA is expressed in an isolated host cell.

153. The method of claim 150, wherein said DNA is operably linked to a recombinant KGF promoter.

154. The method of claim 152, wherein said cell is selected from the group consisting of a bacterial cell, a fungal cell, a mammalian cell and an insect cell.

Sur 37

155. A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide comprising the amino acid sequence 32 to 194 of Figure 7 or a segment of said sequence, wherein said polypeptide has mitogenic activity on BALB/MK cells.

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156. The method of claim 155, wherein said polypeptide comprises Met at the amino terminus.

157. The method of claim 155, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

158. The method of claim 155, wherein said KGF is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

159. The method of claim 155, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

160. The method of claim 155, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

161. The method of claim 155, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

162. The method of claim 155, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

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163. A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide comprising the amino acid sequence 32-194 of Figure 7 or a segment of said sequence, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78.

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164. The method of claim 163, wherein said polypeptide comprises Met at the amino terminus.

165. The method of claim 163 wherein said polypeptide has mitogenic activity on BALB/MK keratinocyte cells.

166. The method of claim 163, wherein said polypeptide stimulates mitogenic activity in epithelial cells.

Sue 59
167. A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide comprising a keratinocyte growth factor (KGF) polypeptide comprising amino acid sequence 32-194 of Figure 7 or a segment of said sequence, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of

Figure 7 is truncated from the C terminus toward the N terminus, within the region of amino acids 194 to 189.

168. The method of claim 167, wherein said polypeptide comprises Met at the amino terminus.

169. The method of claim 167, wherein said polypeptide has mitogenic activity on BALB/MK keratinocyte cells.

170. The method of claim 167, wherein said polypeptide stimulates mitogenic activity in epithelial cells.

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171. A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide comprising amino acid sequence 32-194 of Figure 7 or a segment of said sequence, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78 and is truncated from the C terminus toward the N terminus, within the region of amino acids 194 to 189.

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172. The method of claim 171, wherein said polypeptide comprises Met at the amino terminus.

173. The method of claim 171, wherein said polypeptide has mitogenic activity on BALB/MK keratinocyte cells.

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174. The method of claim 171, wherein said polypeptide stimulates mitogenic activity in epithelial cells.

175. A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises amino acids 32-194 of Figure 7.

176. The method of claim 175, which comprises Met at the amino terminus.

Sur J12

177. A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide is prepared by expressing a DNA encoding a polypeptide comprising the amino acid sequence 32-194 of Figure 7 or a segment of said sequence, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78.

178. The method of claim 177, wherein the DNA is expressed in an isolated host cell.

179. The method of claim 177, wherein said DNA encodes Met at the amino terminus.

180. The method of claim 177, wherein said polypeptide has mitogenic activity on BALB/MK keratinocyte cells.

Sur J13

181. A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) polypeptide comprising the amino acid sequence 32 to 194 of Figure 7 or a segment of said sequence, wherein said polypeptide stimulates mitogenic activity in epithelial cells.

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182. The method of claim 181, wherein said polypeptide comprises Met at the amino terminus.

183. The method of claim 181, wherein said polypeptide is a segment of the polypeptide of Figure 7.

184. The method of claim 181, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

185. The method of claim 181, wherein said KGF is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

186. The method of claim 181, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

187. The method of claim 181, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

188. The method of claim 181, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

189. The method of claim 181, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

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190. A method of stimulating epithelial cells comprising administering to a patient in need thereof an epithelial cell stimulating amount of a keratinocyte growth factor (KGF) comprising a segment of the amino acid sequence 32-194 of Figure 7, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78, and wherein said polypeptide is unglycosylated.

191. The method of one of claims 150 to 189, wherein said polypeptide is unglycosylated.

192. The method of one of claims 150 to 189, wherein said polypeptide is glycosylated.

193. The method of one of claims 38, 57, 64, 69, 73, 77, 82, 88, 95, 105, 106, 111, 114, 147 or 149 which comprises Met at the amino terminus.

Please amend the claims to read as follows:

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66. (amended) The method of claim 64, wherein said polypeptide comprises Met at the amino terminus.

I3

76. (amended) The method of claim 73, wherein said polypeptide comprises Met at the amino terminus.